Metadata for Rock Creek Park, Spatial Vegetation Data: Cover type / Association level of the National Vegetation Classification System

Identification_Information:
Citation:
Citation_Information:
Originator: Air Survey Corporation Sterling, Virginia
Publication_Date: 19961029
Publication_Time: Unknown
Title: Rock Creek Park
Edition: Version 1.0
Geospatial_Data_Presentation_Form: image
Series_Information:
Series_Name: 1.0
Issue_Identification: Unknown
Publication_Information:
Publication_Place: Sterling Virginia
Publisher: Air Survey Corporation
Other_Citation_Details: The aerial photography is CIR 1:6,000 scale.
Online_Linkage: http://biology.usgs.gov/npsveg/rocr/index.html#geospatial_veg_info
Description:
Abstract:
The National Park Service (NPS), in conjunction with the Biological Resources Division (BRD) of the U.S. Geological Survey (USGS), has implemented a program to "develop a uniform hierarchical vegetation methodology" at a national level. The program will also create a geographic information system (GIS) database for the parks under its management. The purpose of the data is to document the state of vegetation within the NPS service area during the 1990's, thereby providing a baseline study for further analysis at the Regional or Service-wide level. Aerial Information Systems (AIS) was subcontracted by Environmental Systems Research Institute (ESRI), the prime contractor, to perform the photointerpretation for the program. ESRI subcontracted The Nature Conservancy (TNC) to conduct the field sampling effort and to support the development of the National Standard Classification.
Purpose:
Several parks, representing different regions, environmental conditions, and vegetation types, were chosen by BRD to be part of the prototype phase of the program. The initial goal of the prototype phase is to "develop, test, refine, and finalize the standards and protocols" to be used during the production phase of the project. This includes the development of a standardized vegetation classification system for each park and the establishment of photointerpretation, field, and accuracy assessment procedures. Rock Creek Park, established in 1890, was designated as one of the prototype parks. The park is located on the fall line between the Atlantic coastal plain and the piedmont. The main portion of the park is bounded on the north by the Maryland State line and on the south by the Virginia State line. Its western edge follows along Oregon Avenue, and it is bounded on the east by 16th Street NW. The western outlying portions of the Park extend to and slightly beyond Nebraska Avenue NW. The eastern outlying portions extend from 16th Street NW to the junction of US Highway 1 and the Maryland border. The park is noted for having exceptional resources, including six natural resources that maintain its significance within the National Park System. Included in these six natural resources, are three that are directly related to the vegetation of the park. They are: 1) Deciduous forests, 2) Wetlands, and 3) Plant species protected in both Virginia and Maryland. Based on these and other resources, Rock Creek Park is divided up into nine management zones pertaining to vegetation, automobile access, recreation, administration, and cultural resources.

Supplemental_Information:
Rock Creek is one of the largest forested urban parks in the United States, with more the ¾ of the park's approximately 2,760 acres covered by mature deciduous forest. A significant portion of this forest is second growth, with a moderately high diversity in canopy and understory species. Rock Creek Park is made up of steep canyons and side slopes that bisect several significant east-west trending ridgelines. The park descends along the fall line through numerous small rapids along the creek. Rock Creek itself, descends over 150' from the state line to its confluence with the Potomac River. Flood plain development is fairly restrictive, limited primarily to Rock Creek itself. Broad Branch, the main tributary to Rock Creek within the park, flows southeasterly and joins Rock Creek towards the southern portion of the park. At the confluence, the park boundary significantly narrows in its east-west extent. All sections are accessible either by automobile or by hiking. Most portions of the park are accessible through short hikes, usually under one mile. Gradients above the floodplain are surprisingly steep, and make for some moderate hiking. For purposes of vegetation mapping, the park was divided into four sections pertaining primarily to its location on the fall line between the coastal plain and piedmont. The park was further divided into the main portion of the park (containing Rock Creek), and the various outliner portions of the park to the east and west.

Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19961029
Currentness_Reference: Source_Photography_Date

Status:
Progress: Complete
Maintenance_and_Update_Frequency: None Planned

Spatial_Domain:
Description_of_Geographic_Extent:
The park is located on the fall line between the Atlantic coastal plain and the piedmont. The main portion of the park is bounded on the north by the Maryland State line and on the south by the Virginia State line. Its western edge follows along Oregon Avenue, and it is bounded on the east by 16th Street NW. The western outlying portions of the Park extend to and slightly beyond Nebraska Avenue NW. The eastern outlying portions extend from 16th Street NW to the junction of US Highway 1 and the Maryland border.
Bounding_Coordinates:
West_Bounding_Coordinate: 77.1
East_Bounding_Coordinate: 77
North_Bounding_Coordinate: 38.98333
South_Bounding_Coordinate: 38.9

Keywords:
Theme:
Theme_Keyword_Thesaurus: None
Theme_Keyword: National Park Service
Theme_Keyword: U.S. Geological Service
Theme_Keyword: The Nature Conservancy
Theme_Keyword: Aerial Information Systems
Theme_Keyword: Center for Biological Informatics
Theme_Keyword: land cover
Theme_Keyword: vegetation
Theme_Keyword: community
Theme_Keyword: association
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Rock Creek Park
Place_Keyword: Washington D.C.
Place_Keyword: USA
Stratum:

Stratum_Keyword_Thesaurus: None
Stratum_Keyword: Glover Archbold Park and Environs
Stratum_Keyword: Fort Totten Park, Barnard Hill Park and Environs
Stratum_Keyword: Land Use Areas of the Park
Stratum_Keyword: Coastal Plain
Stratum_Keyword: Piedmont
Stratum_Keyword: Forest Zone
Temporal:
Temporal_Keyword_Thesaurus: None
Temporal_Keyword: Data Represents October 1996
Taxonomy:
Keywords/Taxon:
Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: National Vegetation Classification System
Taxonomic_System:
Classification_System/Authority:
Classification_System_Citation:
Citation_Information:
Originator:
United States Department of the Interior National Biological Survey and National Park Service
Publication_Date: 19941101
Title:
Standardized National Vegetation Classification System
Edition: Version 1
Geospatial_Data_Presentation_Form: Classification System
Series_Information:
Series_Name: NBS/NPS Vegetation Mapping Program
Issue_Identification: Final Draft
Publication_Information:
Publication_Place: Redlands, California
Publisher: ESRI
Other_Citation_Details: Prepared by the Nature Conservancy
Identification_Reference:
Citation_Information:
Originator:
United States Department of the Interior National Biological Survey and National Park Service
Publication_Date: 19941101
Title:
Standardized National Vegetation Classification System
Edition: Version 1
Geospatial_Data_Presentation_Form: Classification System
Series_Information:
Series_Name: NBS/NPS Vegetation Mapping Program
Issue_Identification: Final Draft
Publication_Information:
Publication_Place: Redlands, California
Publisher: ESRI
Other_Citation_Details: Prepared by the Nature Conservancy
Taxonomic_Procedures:
See "Photo Interpretation Report, BRD/NPS Vegetation and Inventory and Mapping Program, Rock Creek Park," October 1, 1998 <http://biology.usgs.gov/npsveg/rocr/pi_rpt.pdf>
Taxonomic_Completeness: Complete
General_Taxonomic_Coverage:
Vegetation Alliances of the National Vegetation Classification System (October 1995)
Taxonomic_Classification:
Taxon_Rank_Name: Kingdom

Taxon_Rank_Value: Plantae
Access_Constraints: None
Use_Constraints:
Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analysis. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations should be given to the U.S. Geological Survey and the National Park Service
Point_of_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization:
USGS Biological Resources Division, Center for Biological Informatics
Contact_Address:
Address_Type: Physical Address
Address: USGS
Address: Biological Resources Division, CBI
Address: Building 810, Room 8000
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA
Contact_Address:
Address_Type: Mailing Address
Address: USGS
Address: Biological Resources Division, CBI
Address: PO BOX 25046, DFC, MS302
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: 303-202-4229
Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Browse_Graphic:
Browse_Graphic_File_Name: http://biology.usgs.gov/npsveg/rocr/images/rocrveg.jpg
Browse_Graphic_File_Description: 121 Kbyte graphic in map composition layout
Browse_Graphic_File_Type: JPG
Security_Information:
Security_Classification_System: None
Security_Classification: None
Security_Handling_Description: None
Native_Data_Set_Environment: UNIX-ARC/INFO

Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report:
Code verification involved running each coverage attribute file through a series of ARC/INFO commands that checked for invalid codes. These commands produced listings that aided in identifying abnormal codes. The errors were checked against the vegetation delineation and attribute overlays. Corrections were made to the listings and input into the database. ESRI produced a plot of the converted spatial data and sequence numbers (label I.D.s) for the manuscript. The plot was checked by AIS for cartographic quality of the arcs defining the polygon features and the accuracy of the label I.D. assignments. The plot was overlaid to the manuscript map to

verify that the scanned data was not distorted beyond .02 map inches. Other problems were noted on the plots, such as overshoots and undershoots, missing lines, premature convergence of polygon boundary lines that intersected arcs at acute angles, and incorrect sequence number assignments. ESRI produced code verification plots of the community association codes, height and density codes, and land use code attributes. The plots were checked for coding errors that may have occurred during the polygon attribute encoding step. The plots were overlaid on the manuscript map with attached corresponding code attribute overlay created in the manual rectification step. Code changes were noted on the plot. The edited plots were delivered back to ESRI for correction of the attribute files. Processors conducted interactive ARCEDIT sessions to make the necessary corrections to the coverages.

Logical_Consistency_Report:
All polygon features are checked for topology using the ARC/INFO software. Each polygon begins and ends at the same point with the node feature. All nodes are checked for error so that there are no dangling features. There are no duplicate lines or polygons. All nodes will snap together and close polygons based on a specific tolerance. If the node is not within the tolerance, it is adjusted manually. The test for logical consistency are performed in ARC/INFO.

Completeness_Report:
All data that can be photointerpreted is also digitized. This includes alliance/association classes, surface water, and unvegetated/landuse.

Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report:
Unknown. The positional accuracy of the base digital ortho image is not known. It is assumed the map meets National Map Accuracy Standards.

Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report:
Unknown. The positional accuracy of the base digital ortho image is not known. It is assumed the map meets National Map Accuracy Standards.

Lineage:
Methodology:
Methodology_Type: Field
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: AIS
Methodology_Description:
The normal process in vegetation mapping is to conduct an initial field reconnaissance, map the vegetation units through photointerpretation, then conduct a field verification. The field reconnaissance visit serves two major functions. First, the photointerpreter keys the signature on the aerial photos to the vegetation on the ground at each signature site. Second, the photointerpreter becomes familiar with the flora, vegetation communities and local ecology that occur in the study area. Park and /or TNC field biologists that are familiar with the local vegetation and ecology of the park are present to help the photointerpreter understand these elements and their relationship with the geography of the park.

Upon completion of the field reconnaissance, photo interpreters delineate vegetation units on mylar that overlay the 9x9 aerial photos. This effort is conducted in accordance with the TNC vegetation classification and criteria for defining each community or alliance. The initial mapping is then followed by a field verification session, whose purpose is to verify that the vegetation units were mapped correctly. Any PI related questions are also addressed during the visit.

The vegetation mapping at Rock Creek Park in general followed the normal mapping procedure as described above. However, a TNC vegetation classification did not exist for Rock Creek Park at the time the initial delineations commenced. The TNC ecologist and AIS photo interpreters worked together to develop a temporary signature key which addressed what was known at the time. Unlike most parks, no existing plot data was available to create an interim classification.

Methodology_Citation:
Citation_Information:

Originator: Aerial Information Systems (AIS)
Publication_Date: Unpublished Material
Publication_Time: Unknown
Title:
Photo Interpretation Report USGS-NPS Vegetation Mapping Program Rock Creek Park
Edition: Version 1
Geospatial_Data_Presentation_Form: Report
Series_Information:
Series_Name: Unknown
Issue_Identification: Unknown
Publication_Information:
Publication_Place: Unknown
Publisher: Ed Reyes
Other_Citation_Details: Unknown
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: TNC
Source_Information:
Source_Citation:
Citation_Information:
Originator: Air Survey Corporation Sterling, Virginia
Publication_Date: 19961029
Publication_Time: Unknown
Title: Rock Creek Park
Edition: Version 1.0
Geospatial_Data_Presentation_Form: image
Series_Information:
Series_Name: 1.0
Issue_Identification: Unknown
Publication_Information:
Publication_Place: Sterling Virginia
Publisher: Air Survey Corporation
Other_Citation_Details: The aerial photography is CIR 1:6,000 scale.
Online_Linkage: http://biology.usgs.gov/npsveg/rocr/photos.html
Source_Scale_Denominator: 12000
Type_of_Source_Media: CIR Aerial Photography
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19961029
Time_of_Day: Unknown
Source_Currentness_Reference: publication date
Source_Citation_Abbreviation: ASC
Source_Contribution: None
Process_Step:
Process_Description: See Methodology Description above.
Source_Used_Citation_Abbreviation: ASC
Process_Date: 19981001
Process_Step:
Process_Description:
The following continues to describe the tasks performed and methodologies used by Aerial Information Systems (AIS) during the vegetation data compilation for Rock Creek Park. DATA CONVERSION: Typically, the first step of the data conversion process is the Manual rectification was conducted by attaching a new mylar overlay to the base. The photo signature delineation units were transferred to the overlay through local registration of the photos with the attached photo signature delineation overlay. Existing orthophotography for Rock Creek Park was created from photos flown in leaf off conditions. Although this allowed greater ease for viewing features such as roads in forest canopies, it proved

difficult to register vegetation from leaf on photography to the early spring leaf off orthophotography. A small area of the photo was registered to the base at a time. By matching photo image to orthophoto image, the delineations were transferred to the base overlay. Because the parallax of the photo differs from that of the orthophoto base, care was required in transfer. Inconsistent stretching or shortening of the images was common from the photo to the base. When one area was completed, the photo was shifted to register to another small area. The process continued until the manual rectification and transfer of polygons was complete. The codes for PI signature type, height, density, and community type were transferred from the corresponding photo overlays.

Process_Date: 19980601

Process_Step:

Process_Description:

FIELD RECONNAISSANCE EFFORT: A three day photointerpretation field reconnaissance effort was conducted in May 1997 (see section III) to tie the photo signatures delineated on the aerial photographs with units evident on the ground. The field crew consisted of Eden Crane and Sue Salmons (park biologists), Virginia Crouch (Heritage biologist), Julie Lundgen (TNC ecologist) and John Menke (AIS photointerpreter).

Prior to the field reconnaissance effort, several in-house preparations were performed in order to facilitate a more organized trip. Each photo was prepared with a separate field overlay. Locational features (roads, buildings, etc) were drafted onto the overlays. Each photo was reviewed and field transect sites were chosen representing different signatures types, geographic variables (% slope, aspect, shape of the slope, elevation), and other abiotic variables noted on the photography. These sites were drafted onto the field overlays with notations to each site as needed. Multiple siteswere chosen to provide alternatives if one or more sites proved inaccessible.

The field crew conducted on-site investigations over the three-day period. During the field visit, the photointerpreter worked with the field biologists to identify the plant species, preliminary vegetation communities, and their associated photo signatures throughout the park. Field site numbers were annotated directly onto the photo field overlay, thereby correlating the field site to a specific location and photo signature. A field notebook was used to record pertinent information (canopy dominance, understory species present, abiotic features, disturbance history) for each site visited. Several ground photos were taken at selected locations that were later tied back to the aerial photographs and the field sites. Sites not previously identified on the photos were also visited. These sites included areas between initially selected sites, areas of noteworthy or unusual significance as determined by park personnel, and areas the photointerpreter deemed important in transit from site to site.

Process_Date: 19981001

Spatial_Data_Organization_Information:

Indirect_Spatial_Reference:

The ecology field sites were digitized to indicate the area for which a TNC ecologist conducted an ecological field sampling.

Direct_Spatial_Reference_Method: Point

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Point

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Planar:

Grid_Coordinate_System:

Grid_Coordinate_System_Name: Universal Transverse Mercator

Universal_Transverse_Mercator:

UTM_Zone_Number: 18
Transverse_Mercator:
Longitude_of_Central_Meridian: -180
Latitude_of_Projection_Origin: -90
False_Easting: 50000
False_Northing: 0
Scale_Factor_at_Central_Meridian: 0.9996
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 1
Ordinate_Resolution: 1
Planar_Distance_Units: Meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodedic Reference System 80
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257
Vertical_Coordinate_System_Definition:
Altitude_System_Definition:
Altitude_Datum_Name: North American Vertical Datum of 1988
Altitude_Resolution: 1
Altitude_Distance_Units: Feet
Altitude_Encoding_Method: Explicit elevation coordinate included with horizontal coordinates

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview:
The system is organized hierarchically to support conservation and resource stewardship applications across multiple scales. The upper levels of the hierarchicy are based on the physical form or structure of the vegetation (physiognomy) and have been refined from the international standards developed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The two most detailed levels of the hierearchy are based on the species composition of the existing vegetation (floristics) and reflect the phyto-sociological standards that were originally developed by European ecologists. The vegetation classification is continually advanced through the collection and analysis of new field data and will be greatly strengthened during the course of the USGS-NPS mapping efforts. National Park Service/Biological Resources Division Vegetation Inventory and Mapping Program for Rock Creek Park,Washington DC, Final Community Association Classification, March, 1998. DATA DICTIONARY - ROCK CREEK PARK Data Format Outline: Variable Coverage related variables: Area818F Perimeter818F Veg#45B Veg-id45B Defined variables: Seqno33I Mod44C PI 22I Height11I Density11I TNC 33C Landuse44C Pattern11I Data Dictionary: MOD (Defines the modules corresponding to the DOQQ file name. 6 total - roughly corresponding to the six individual plots) WE4 WW1 WW2 WW3 WW3E WW4 Defines Photointerpretation Signature Type (PI) Non Forest Types: 01=Code not Used 02=Managed grass/lawns 03=Meadow grasslands (native component) 04=Shrub areas (forest edges) 05=Canopy openings (shrubs, vines, some trees) 06=Water 99=Urban/disturbed (see detailed Urban codes in Land Use field) Forest Types: 10=Floodplain areas 11=Ash swamps 12=Oak/beech 13=Mesic oak 14=Dry mesic oak 15=Tulip/oak 16=Tulip 17=Pine/oak 18=Tulip/oak/beech 19=Tulip floodplain 20=Exotic/planted trees with managed grass/lawn Defines Height (HEIGHT) 1=< 0.5 meters 2=0.5-2 meters 3=2-5 meters 4=5-15 meters 5=15-35 meters 6=35-50 meters 7=> 50 meters 9=Not Applicable Defines Density (DENSITY) 1=Closed/Continuous>60% 2=Discontinuous40%-60% 3=Dispersed25%-40% 4=Sparse10%-25% 5=Rare2%-10% 9=Not Applicable Defines Mapping Classification Communities and Variants (TNC) 01=Forest canopy gap 02=Loblolly pine - mixed oak forest Pinus taeda - Quercus (alba, falcata, stellata) Forest [Provisional] 03=Virginia pine - oak forest Pinus virginiana - Quercus (alba, stellata, falcata, velutina) Forest Association 04=Sycamore – green ash forest (floodplain forest) Platanus occidentalis - Fraxinus pennsylvanica Forest 05=Tulip poplar forest Liriodendron tulipifera

Forest [Provisional] 06=Chestnut oak forest Quercus (prinus, velutina) / Gaylussacia baccata Forest 07=code not used 08=MIXED OAK/BEECH VARIANT of Beech - white oak / mayapple forest Fagus grandifolia - Quercus alba / Podophyllum peltatum Forest 09=code not used 10=Beech - white oak / mayapple forest (CLASSIC TYPE) Fagus grandifolia - Quercus alba / Podophyllum peltatum Forest 10B=Beech - white oak / mayapple forest (CLASSIC TYPE) beech/tulip component Fagus grandifolia - Quercus alba / Podophyllum peltatum Forest 11=Shrub areas 12=Managed grass/lawns 13=Meadow grasslands 14=Managed grass/lawns with trees 98=Water Defines Land Use (LANDUSE) 1000=Urban 1900=Residential 1910=Commercial and Services 1911=Nature center and planetarium 1912=Horse center; maintenance yard 1913=Park headquarters 1914=Park police 1915=Amphitheater 1916=Mixed park facilities 1917=Center for Urban Ecology 1918=Fort Stevens 1919=Fort Reno Park 1920=Industrial 1930=Transportation, Communications, and Utilities 1931=Road 1932=Parking Area 1940=Industrial and Commercial Complexes 1950=Mixed Urban or Built-up Land 1960=Other Urban or Built-up Land 1961=Community gardens 1962=Golf course 1963=Ball fields 1964=Tennis stadium and/or courts 1965=Tennis courts and gardens 1966=Swim center 1967=Area Under Construction 1968=Cemetery 2000=Agriculture 3000=Natural Vegetation 8000=Water Defines Pattern (PATTERN) 1 = Evenly Dispersed 2 = Clumped / Bunched 3 = Gradational / Transitional 4 = Alternating 9 = Not Applicable FILE SPECIFICATIONS: Coordinate system: NAD83 - Maryland State Plane (zone 4126)

Entity_and_Attribute_Detail_Citation:

Grossman, D. Et al. 1994. National Park Service Vegetation Mapping Project, Standardized National Vegetation Classificatrion System 209 pp.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Organization: U.S. Geological Survey, Center for Biological Informatics

Contact_Address:

Address_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810, Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: 303-202-4229

Contact_Facsimile_Telephone: 303-202-4219 (org)

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Resource_Description: ROCR Veg Map

Distribution_Liability:

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Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: HTML

Digital_Transfer_Option:

Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: http://biology.usgs.gov/npsveg/rocr/index.html#geospatial_veg_info
Fees: None

Metadata_Reference_Information:
Metadata_Date: 200102
Metadata_Review_Date: 20060905
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Address:
Address_Type: mailing and physical address
Address:
U.S. Geological Survey, Center for Biological Informatics, MS 302,
Room 8000, Building 810, Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: (303) 202-4219
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: http://biology.usgs.gov/fgdc.bio/bionwext.txt
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999